

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-15 (Cancelled).

Claim 16 (New): A method for operating a haptic interface unit, comprising:
receiving at least velocity information data with respect to at least one haptic device;
generating interaction feedback force data based on and in dependence of at least said velocity information data, said interaction feedback force data being representative for an interaction feedback force to be generated by said at least one haptic device;

transmitting said interaction feedback force data to said at least one haptic device so as to generate said interaction feedback force;

providing an inverted damping operation mode in which at least partially generating said interaction feedback force data to be representative for an interaction feedback force which increases with a decreasing velocity, and said interaction feedback force data are at least partly generated to be representative for an interaction feedback force which decreases with an increasing velocity, wherein said velocity is with respect to a respective haptic device or a pointing unit thereof; and

decreasing an absolute force value of the interaction feedback force or a vectorial component thereof to zero if the respective velocity or a vectorial component thereof increases above a given threshold maximum velocity value.

Claim 17 (New): The method according to claim 16, further comprising:

providing a holding force mode in which the absolute force value of the interaction feedback force or a vectorial component thereof is increased in a position dependent form to a predetermined hold force value larger than said interaction feedback force, if the respective

velocity or a vectorial component thereof decreases below a given threshold minimum velocity value.

Claim 18 (New): A method for operating a haptic interface unit, comprising:

- receiving at least velocity information data with respect to at least one haptic device;
- generating interaction feedback force data based on and in dependence of at least said velocity information data, said interaction feedback force data being representative for an interaction feedback force to be generated by said at least one haptic device;
- transmitting said interaction feedback force data to said at least one haptic device so as to generate said interaction feedback force;
- providing an inverted damping operation mode in which said interaction feedback force data are at least partly generated to be representative for an interaction feedback force which increases with a decreasing velocity and said interaction feedback force data are at least partly generated to be representative for an interaction feedback force which decreases with an increasing velocity, wherein said velocity is with respect to a respective haptic device or a pointing unit thereof; and
- providing a holding force mode in which an absolute force value of the interaction feedback force or a vectorial component thereof is increased in a position dependent form to a predetermined hold force value or above, if the respective velocity or a vectorial component thereof decreases below a given threshold minimum velocity value, the predetermined hold force value being larger than the interaction feedback force within said inverted damping operation mode.

Claim 19 (New): The method according to claim 18, further comprising:

decreasing the absolute force value of the interaction feedback force or a vectorial component thereof to zero, if the respective velocity or a vectorial component thereof increases above a given threshold maximum velocity value.

Claim 20 (New): The method according to claim 18, further comprising:
performing said inverted damping operation mode with respect to vectorial components of said interaction feedback force and said velocity.

Claim 21 (New): The method according to claim 18, further comprising:
performing said inverted damping operation mode with respect to vectorial components of said interaction feedback force and said velocity in an independent manner.

Claim 22 (New) The method according to claim 18, further comprising:
generating said interaction feedback force data to describe said interaction feedback force as a damping force, so as to generate an interaction feedback force acting against a given velocity or a vectorial component thereof.

Claim 23 (New): The method according to claim 18, further comprising:
generating said interaction feedback force data to describe said interaction feedback force as a damping force, so as to generate an interaction feedback force acting against a given velocity or a vectorial component thereof as a counterforce or a frictional force.

Claim 24 (New): The method according to claim 18, further comprising:
generating the interaction feedback force data to describe said interaction feedback force or a vectorial component thereof as having an absolute force value f being, at least

piecewise, a positive monotonically decreasing function g of the respective velocity v or of a vectorial component thereof to fulfill the relation

$$f(v) \propto g(v).$$

Claim 25 (New): The method according to claim 24, further comprising:

selecting said at least piecewise positive and monotonically decreasing function g to fulfill at least piecewise the relation

$$g(v) = \frac{1}{h(v)},$$

where h is at least piecewise a positive and monotonically increasing function of the velocity v or of a vectorial component thereof.

Claim 26 (New): The method according to claim 24, further comprising:

selecting said at least piecewise positive and monotonically decreasing function g to fulfill at least piecewise the relation

$$g(v) = \frac{1}{|v|},$$

where v denotes a velocity or vectorial component thereof.

Claim 27 (New): The method according to claim 24, further comprising:

selecting said at least piecewise positive and monotonically decreasing function g to be at least piecewise one of a step function, a staircase function and a linear function.

Claim 28 (New): The method according to claim 18, further comprising:

generating said interaction feedback force data to describe said interaction feedback force as a force which is at least piecewise dependent on a scalar position or a vector position.

Claim 29 (New): The method according to claim 28, further comprising:
selecting said scalar position or vector position to describe a position of a respective haptic device or said pointing unit thereof.

Claim 30 (New): The method according to claim 28, further comprising:
selecting said scalar position or vector position to describe a position of a corresponding abstract pointing means within a data structure.

Claim 31 (New): The method according to claim 28, further comprising:
selecting said scalar position or vector position to describe a position of a corresponding abstract pointing means within a graphical user interface.

Claim 32 (New): A haptic interface unit, comprising:
means for performing an operating method according to claim 18 and the steps thereof.

Claim 33 (New): A computer program product, comprising computer program means adapted to perform a method for operating a haptic interface unit according to claim 18 and the steps thereof, when it is executed on a computer or a digital signal processing means.

Claim 34 (New): A computer readable storage medium, comprising a computer program product according to claim 33.